



# **COMMONWEALTH OF VIRGINIA Shelter and Evacuation Gap Report (Final)**

# PROJECT EXECUTIVE SUMMARY

## INTRODUCTION

The Office of Veterans Affairs and Homeland Security (OVAHS), in its oversight role for Commonwealth preparedness and interoperable communications, implemented an approach and methodology to review, assess, and identify strengths and areas for improvement in ongoing shelter and evacuation planning and the horizontal (State agency to State agency) and vertical (State to local) integration of plans.

## METHODOLOGY AND APPROACH

Working with an ad-hoc sub-committee of the Homeland Security Working Group (HSWG) known as the Integrated Planning Executive Committee (IPEC) the project was designed and implemented in related, but independent phases:

Phase I – Commonwealth-level Review (Plan Reviews, Online Surveys, and confidential In-person Interviews)

Phase II – Local-level Review (Plan Reviews, Online Surveys, and confidential In-person Interviews)

*\* Phase I plan reviews included the 2007 Commonwealth of Virginia Emergency Operations Plan (COVEOP) Base Plan, Emergency Support Functions (ESFs) 1 – Transportation; 2 – Communications; 6 - Mass Care, Emergency Assistance, Housing, and Human Services; 7 - Logistics Management and Resource Support; 13 – Public Safety and Security, and 17 - Volunteer and Donations Management; and the COVEOP Annexes for Sheltering, Evacuation, and Hurricane. This plan has been superseded by the 2012 COVEOP, signed by Governor McDonnell on Aug 20, 2012.*

*\*\* Phase II plan reviews included local emergency operations plans and other supporting documents furnished by local governments and local emergency management organizations.*

This plan and methodology was approved by the IPEC on January 24, 2012. A combination of plan reviews, surveys, and confidential personal interviews were used in gathering the information presented in this report. During the course of the confidential personal interviews, interviewees were asked about their individual perceptions on various issues; consequently, report findings from these interviews may contain bias attributed to training deficiencies, awareness inconsistencies, or parochial perspectives. It was important to the IPEC to identify these perspectives, regardless of potential bias, in order to develop program improvements specific to these perceptions.

## FINDINGS

Phase I – Commonwealth-level Review

The findings in the Phase I review centered around seven major capabilities/task areas with multiple recommendations identified. Below is a short synopsis of the issue for each capability/task area with the number of associated recommendations listed in parenthesis.

**Shelter Management:** Despite considerable work developing the State Managed Shelter (SMS) program, shortfalls exist in policy, roles and responsibilities, plans, and operational capabilities. Additionally, there is an absence of a comprehensive Commonwealth shelter management strategy outlining all sheltering capabilities across state, local and various agency

lines. (Note: the State managed Shelter Program is only one component of a comprehensive state wide sheltering program).

**Evacuation:** While a considerable amount of evacuation-related planning has been completed (e.g., I-64 Lane Reversal Plan), more planning at both the State and local levels, including the continued development of Bower's Hill Lane Reversal strategy and local-level evacuation planning to integrate local strategies with the State evacuation plans, would serve improve the program further.

**Commonwealth's Preparedness Culture:** The Commonwealth's emergency management mission and culture will benefit from greater integration between, coordination between, and oversight of the Commonwealth of Virginia Emergency Operation Plan (COVEOP) and State agency operational support plans.

**Planning:** While a tremendous amount of preparedness planning has occurred at all levels of government, gaps continue to exist in plans and functional areas where more planning is warranted. Additionally, while there is a process in place for VDEM to coordinate periodic revisions to the COVEOP, the Commonwealth would benefit from additional or more formal communication to entities with roles in the plan, regarding how that process is implemented.

**Training and Exercises:** Availability of training and exercises to support the COVEOP execution is abundant across departments and agencies; however, feedback from staff indicates that there is not enough time to engage in training while also maintaining primary job duties. Additionally, declining Federal grant funding for training and exercises will likely impact future training and exercise availability unless supplemental funding is provided from the Commonwealth. This issue is not unique to Virginia; it is widely shared among state, local and tribal emergency personnel nationally.

**Situational Awareness:** The Commonwealth has developed both geospatial, web reporting and telecom based information sharing vehicles. Significant improvements can still be made to communicating the event picture by developing additional standard processes, technology, and methods to maintain near real-time situational awareness of incidents across all departments, agencies, and levels of government. Further work in this area will reduce confusion, stove-piping of information, and promote better use of labor and resources.

The findings in the Phase II review centered around six major capabilities/task areas with multiple recommendations identified. Below is a short synopsis of the issue for each capability/task area with the number of associated recommendations listed in parenthesis.

**Mass Care and Sheltering:** Individual interviews have identified concerns at the local level regarding the Commonwealth's ability to open and sustain State Managed Shelter operations. Additional coordination and communication on sheltering issues between the Commonwealth and local jurisdiction representatives would improve the overall sheltering program and address this issue.

**Planning:** Several opportunities for improvement were identified. Key areas include: a need for additional technical staff to support planning across the 136 localities; maintaining planning for low frequency/high-risk incidents but refocusing additional efforts toward higher frequency/lower risk incidents as well as planning for re-entry, recovery, and additional regional catastrophic planning.

**Information Sharing and Dissemination:** Interviews reveal concern among local emergency management representatives that horizontal and vertical information sharing and dissemination are not optimal. Areas identified for improvement include processes and procedures for the use of WebEOC, and the Request for Assistance (RFA) process. Horizontal information sharing was also identified as suboptimal due to more than 100 regional working groups and committees that overwhelm staff who must balance these involvements with daily job responsibilities.

**Communications:** A demonstrated strength for the Hampton Roads region is the depth of capabilities to communicate within the region and with the Commonwealth. Areas for improvement identified include increased capabilities to communicate with the multiple military organizations within the region and the need for more training and exercises to validate communications plans and processes.

**Emergency Operations Center Management:** Sufficient EOC processes and procedures are in place to effectively coordinate emergency operations, but depth in EOC staffing at the local level is a concern. Local jurisdictions propose that the Commonwealth consider “operationalizing” its conference calls to go beyond the provision of weather warnings. Critical Resource Logistics and Distribution: The process of requesting resources from the Commonwealth and resource tracking following the request are a challenge for local jurisdictions. Additionally, more planning by the Commonwealth to identify, develop, implement, and validate processes for prioritizing the distribution of critical resources during significant incidents in the Hampton Roads area would be beneficial.

## **SUMMARY**

It was recognized that there are scores of professionals across the Commonwealth and local jurisdictions working hard to increase preparedness and operational capabilities to support emergency management. It is also clear there are opportunities for improvement. There is a need for additional policy, strategy, plans, procedures, and capabilities across the emergency management spectrum to enhance existing, and develop new capabilities. With the interdependencies between functional areas, both horizontally and vertically, being such a critical factor in emergency management, strong oversight and processes need to be in place to ensure plans, policies, processes, and procedures are integrated throughout the Commonwealth.

# **PROJECT SUMMARY**

The following is a detailed summary of purpose, overarching goals, and detailed objectives for the Commonwealth of Virginia Emergency Operations Plan Assessment Methodology and Approach.

## **IDENTIFICATION AND COLLECTION OF STATE OPERATIONS PLANNING DOCUMENTS**

### **Purpose**

Collect the current versions of the COVEOP and the primary planning document(s) for the following Commonwealth of Virginia Emergency Support Functions (ESFs):

- ESF-1/Transportation
- ESF-2/Communications
- ESF-6/Mass Care, Emergency Assistance, Housing, and Human Services
- ESF-7/Logistics Management and Resource Support
- ESF-13/Public Safety and Security
- ESF-17/Volunteer and Donations Management

### **Approach and Methodology**

A team of highly qualified emergency management professionals and technical subject matter experts reviewed each planning document. The review included an assessment of each plan against national standards and guidance. Each review team also summarized its overall impression of the documents reviewed and specific, cross-cutting points of review specified by the Commonwealth.

Each team consisted of a primary and a secondary reviewer. The primary reviewer was responsible for a thorough, detailed technical review of each assigned plan (or set of plans) and a narrative summary as described above. The secondary reviewer helped to ensure consistency and continuity of plan reviews and minimize the opportunity for individual bias. The two worked as a team to insure a comprehensive, high-quality review of each plan.

Reviewers were assigned based on their knowledge, skills, and previous experience with the subject matter. Every effort was made to ensure continuity throughout each function (i.e., assigning the same reviewer across all plans for the transportation function). All reviewers received a copy of the Approach and Methodology document and other written and oral guidance on their detailed roles, responsibilities, and requirements.

After an internal kickoff meeting, all review team members were oriented to the scope of the project, client expectations, and the project approach and methodology.

The technical review process for each planning document was accomplished in three parts, as described below.

## **SURVEYS AND INTERVIEWS**

### **Purpose**

Understand the capabilities and readiness of Commonwealth of Virginia stakeholder agencies and departments to execute their roles and responsibilities under the COVEOP.

## Overarching Goals

- (1) Generate a broad understanding of knowledge, attitudes, beliefs, behaviors, and perceptions from regional and local jurisdictions receiving support under the COVEOP.
- (2) Generate a specific understanding of strengths, weaknesses, gaps, and areas for improvement from Commonwealth of Virginia agency and department stakeholders with roles and responsibilities under the COVEOP.

## Detailed Objectives

- (1) Develop and distribute a survey tool to selected Commonwealth agencies and departments about their capabilities and current level of readiness under the COVEOP.
- (2) Develop an interview guide and conduct interviews with selected Commonwealth agencies and departments to clarify survey responses and learn more about overall capabilities and readiness to support responsibilities under the COVEOP.

## Stakeholder Participation

The following Commonwealth primary agency stakeholders for participation in this phase of the project:

VDEM	ESF-2 Communications ESF-7 Resource Management ESF-17 Volunteer and Donations Management
VDOT	ESF-1 Transportation
VITA	ESF-2 Communications
VDSS	ESF-6 Mass Care, Housing and Human Services
VSP	ESF-13 Public Safety and Security

## Approach and Methodology – Surveys

An online survey tool was developed to examine State department and agency capabilities and levels of readiness to execute their responsibilities under the COVEOP. The Commonwealth of Virginia identified key individuals and stakeholders from each primary department or agency listed above to complete the survey for their organizations. The survey served as the precursor to an in-person interview and captured data on knowledge, attitudes, beliefs, behaviors, and perceptions about current capabilities and readiness levels.

To streamline coordination, SurveyMonkey.com was used to develop the online survey and send it (via e-mail) to each state department and agency specified by the Commonwealth. The survey asked about the department or agency's response capabilities in relation to the capability elements in the DHS *Target Capabilities List (TCL)* and the department or agency's assigned responsibilities under the COVEOP. The survey also helped measure the availability of required assets and resources as well as any gaps or shortfalls. The project team tabulated and reviewed the data from the survey results to inform the interview methodology for additional discussion points about strengths, gaps, and areas for improvement.

## **Approach and Methodology – Interviews**

In-person confidential interviews were conducted with stakeholders, selected by the Commonwealth, from each of the primary agencies listed above in the Stakeholder Participation section. The interviews clarified survey responses and furnished more information about preparedness issues including any strengths, weaknesses, gaps, and areas for improvement.

Before the interview, the interviewer reviewed the related plans and analyzed survey responses from agency stakeholders. The reviewer's analysis was used along with a published and approved interview guide on substance, continuity, and direction.

Interview feedback was incorporated into the summary document, which helped inform the Corrective Action Plan (CAP) recommendations.

## **Review and Analysis of Collected Data**

Data from the technical plan review, survey, and interview phases of the project to create a comprehensive set of review points and action-oriented recommendations to the Commonwealth to improve emergency preparedness programs.

*Analysis of Capabilities* presents the major findings of the project by observation, analysis, and recommendation.

## **Recommendations**

The Recommendations incorporated findings from the CAP, summarizing findings by capability, observation, and recommendation.

# ANALYSIS OF CAPABILITIES AND RECOMMENDATIONS

This section focuses on areas of strength and areas for improvement relevant to the Commonwealth, the Hampton Roads Region, and local jurisdictions. It analyzes the information gathered during the plan review, survey, and interviews, and is organized by selected elements of FEMA's TCL. Observed strengths and areas for improvement preface an analysis and recommendation(s) for the observation.

## CAPABILITY/TASK: SHELTER MANAGEMENT

### Reference(s):

- Identify planning strengths and best practices within primary agency plans and the COVEOP for Commonwealth agencies.
- Identify planning gaps and areas for improvement.

**Summary of Issue:** There is a need for a comprehensive Commonwealth shelter management strategy identifying the roles and responsibilities of each level of government, the various sheltering capabilities available to be implemented based on the incident's intensity, and the decision matrices for implementation of each capability. Local Emergency Managers need a clearer understanding of local and state government roles and responsibilities for sheltering. Many local governments have not fully defined their available shelter facilities, capabilities, and capacity. State-managed shelters have never been utilized and the standard operating procedures (SOPs) are still being developed. Locality representatives who responded question the State government's approach to sheltering and believe it lacks the required resources to successfully execute the Commonwealth's Mass Sheltering Plan. Expectations concerning available shelter information vary widely and current information suggests a shortfall between the potential number of evacuees seeking shelter during a catastrophic incident and those that can be accommodated.

### Analysis:

Several strengths were found in the Commonwealth's plans and procedures for State Managed Shelters (SMS). The Virginia Department of Social Services (VDSS) has standing Memoranda of Understanding (MOUs) for state facilities and shelter sites throughout the Commonwealth. SMS facility plans are thorough, detailed, and well organized. It is apparent that much time and effort has been invested in developing and maintaining these plans, which reside in a central VDSS location on the internet.

These demonstrated strengths notwithstanding, sheltering is actually the single most complex issue facing emergency management in the Commonwealth, and the SMS is only one option available for sheltering (not the only option). Following Hurricane Katrina, Virginia's then governor proclaimed that if a disaster compelled a mass evacuation, Virginia's citizens would be sheltered in Virginia – giving the impetus and priority for SMS planning. Although the project team could find no written documentation of the then governor's intent, many participants confirmed its existence. Documents do show that SMS planning efforts have been underway since late 2006 or early 2007.

Several key focus areas emerged during the project about gaps and areas for improvement in shelter management.

SMS Metrics. Commonwealth evacuation planning assumptions indicate that 500,000 people could be expected to evacuate out of the region ahead of a catastrophic hurricane. Assumptions are that most evacuees will find a place to stay on their own – family/friends out of the area, hotels, etc.



Local sheltering may not be an option for many affected localities. It is estimated that 10% of evacuees (roughly 50,000 people) will seek public shelter.

If all SMS sites were to be activated, fully staffed, and equipped, the most SMS could handle is estimated to be less than 20,000. The project team found that while the Commonwealth may in fact be able to open 18 shelter facilities, the majority of those would have challenges identifying staff trained to fill all required positions. This means that many evacuees would not be accommodated in the state shelter system. The actual number is unverifiable due to the lack of specific responses to VDEM on the true sheltering capabilities within localities. More effort needs to be applied to identify the actual shelter capacity deficiency so that appropriate planning can be undertaken.

Attitudes and Beliefs. State and local stakeholders vary in their understanding of SMS decision points and the criteria used to activate SMS in the Commonwealth. The only widely understood timing element of SMS planning came after Hurricane Irene, upon examination of the Governor's Hurricane Timeline – that once activated; SMS would take at least 72 hours to become fully functional. Minimal provisions could be made for evacuees and/or displaced populations in less time, but the 72-hour activation timeframe became the generally accepted benchmark.

Most participants believe that sheltering is inherently a local responsibility. SMS planners and some members of the SMS Working Group believe that the Code of Virginia requires localities to shelter their populations. The project team was unable to find a specific Code reference for sheltering responsibility. However, the Code of Virginia grants the Governor broad powers as the Commonwealth's Director of Emergency Management (Title 44-146.17). The Governor may proclaim and publish rules to accomplish the purpose of Title 44 and he may adopt and implement the COVEOP. He also has the authority to issue Executive Orders which "...shall have the force and effect of law..." The COVEOP is promulgated by an Executive Order. Title 44-146.24 requires the cooperation of public agencies (including local governments) be extended to the Governor and the Department of Emergency Management upon request, and this would extend to local sheltering. In the current COVEOP, the description of Emergency Support Function #6 clearly states that, "Shelter operations are a local government function to be provided in accordance with local Emergency Operations Plans (EOPs)" In addition, the COVEOP Mass Sheltering Plan, Volume II, Support Annex 6, states that, "shelter operations will be initiated at the local level and begin as a local responsibility."

Localities have developed shelter plans and procedures, but the state has not received comprehensive information from the localities about specific facilities, capabilities, and overall shelter capacities. In some cases this is a result of perceived, but not verified, legal concerns over the suitability of facilities, particularly their ability to weather tropical storm force winds. It was also identified that there is reluctance by some localities to accept the full responsibility for hosting and staffing shelters. State Managed Shelter (SMS) planners are unable to provide specific shelter activation and operational information to localities because of the incident dependent nature of each event. Also, some SMS planners have indicated concern that local emergency managers and their communities may in some way become reliant on a particular SMS site that may or may not be activated depending on the nature of the emergency event. Many local participants interviewed identified a lack of coordination and communication on sheltering issues, and indicated that some localities don't know the sheltering capabilities of other area jurisdictions, nor do they have a clear understanding of the SMS concept. Some interviewees communicated a perception that SMS planning is being conducted without local input as well as a misunderstanding regarding the types of shelter each level of government has responsibility for. The concept of refuges of last resort (ROLR) is perceived to be a State-managed issue by the locals and a local-managed issue by the State. The 2007 COVEOP Mass Sheltering Plan, Volume II, Support Annex 6, defines a

ROLR as, "...a facility that may be identified by a locality..." (page 8). Also, on page 17, "localities that have dense populations or extremely vulnerable areas should designate 'refuges of last resort

A commonly shared concern among local jurisdictions is the Commonwealth's ability to open and sustain State-managed shelter operations. Participants perceive that the Commonwealth hasn't developed a clear or consistent message for SMS. For example, participants mentioned that they at first received information that SMS would be opened only during a lane reversal on I-64. But participants recall being told later that the Commonwealth was working on a plan to open shelters without implementing lane reversals.

Local jurisdictions agree that opening and sustaining State-managed shelters is a significant challenge. Participants are concerned that, despite VDSS efforts to the contrary, there is insufficient training for these operations and that the Commonwealth is relying too much on "on the job training" for State shelter staff.

Much has been said of the Commonwealth's ability to support technology at State-managed shelters. SMS sites are generally not equipped to accommodate the evolving technology needs of shelters. To allow data to flow back and forth between SMS sites, VDSS, and the Virginia Emergency Operations Center (VEOC), State personnel need laptops and various software applications along with basic internet connectivity. The Office of Veterans Affairs and Homeland Security (OVAHS) developed an interim connectivity solution for SMS sites during the 2012 hurricane season that uses a contracted satellite-based ISP. While this solves the short-term issue for the immediate hurricane season, a more comprehensive solution working through the Virginia Information Technology Agency (VITA) will required going forward.

Shelter Planning. The project team began by reviewing the 2007 COVEOP Basic Plan; the ESF-6 Mass Care, Emergency Assistance, Housing, and Human Services plan; the Mass Sheltering Annex to the COVEOP; and the full suite of SMS plans and procedures.

The project team found that the State Mass Sheltering Plan focuses on what needs to be done, but could be improved with additional Standard Operating Procedures (SOPs) that describe in detail "how to do it". Additionally, it could be improved with the inclusion of multiple sheltering options available for implementation. The ESF-6 plan would also benefit from additional supporting documentation or information on integrating people with disabilities and/or access and functional needs and the care of service animals into the shelter. Additionally plans should reflect operational details for the integration of Mass Care, Emergency Assistance, Housing (all phases) and Human Services during response. Finally the plans would be further improved with additional operational context or detail about the decision-making process on how SMS will be established when needed, including how the decision to open SMS will be made and who has the responsibility to develop various SMS options and courses of action for the Governor.

With regard to local and regional sheltering, the project team found few references to inter-jurisdictional or regional support. While sheltering is discussed in local EOPs, it appears that local jurisdictions have largely planned only for their own citizens and don't incorporate the concept of host sheltering for residents from other jurisdictions. For example, a white paper from VDSS to OVAHS in the spring of 2011 gave information about a local host sheltering program that has been offered by VDEM for more than a decade. The program offers full reimbursement for eligible costs to localities that sign local host shelter agreements with VDEM and agree to open local host shelters upon request by the Commonwealth. But only five localities are known to participate in this program.

In the end, the localities presumption appears to be that if a local shelter can't open or needs to be relocated, the Commonwealth will open State-managed shelters. In some cases, the perception is that SMS represents a primary shelter option for localities when in fact the intent of the SMS was for catastrophic incidents only. The project team views this as a flawed assumption and a significant gap that should be addressed in local and regional shelter planning as soon as possible.

Overall, the planning for a comprehensive approach to shelter management is extremely complex and additional resources are needed to meet the assumed need. The current effort should be expanded and further developed with appropriate associated staffing and resources. There should be discussions among all stakeholders, including senior political and career leadership, to resolve the misconceptions of the roles and responsibilities of sheltering within the Commonwealth. Further, a comprehensive shelter management strategy needs to be developed identifying multiple sheltering options (of which SMS is only one) with associated staffing and resource requirements for implementation.

### **Recommendations:**

1. Develop a comprehensive Shelter Management strategy to identify the most demanding scenario, current capabilities, and potential solutions for further exploration.
2. Develop a summary, for inclusion in the COVEOP, to explain the sheltering strategy in Virginia.
3. Conduct regional workshops to address and educate local Emergency Coordinators in sheltering roles, responsibilities, and expectations.

## **CAPABILITY/TASK: EVACUATION**

**Reference:** Achieve a specific understanding of strengths, weaknesses, gaps, and areas for improvement from Commonwealth of Virginia agency and department stakeholders about Evacuation planning.

**Summary of Issue:** While a considerable amount of evacuation-related planning has been done, additional planning will be beneficial at both the State and local levels.

**Analysis:** In any state or region the evacuation of close to a million people is a daunting task, especially considering limited evacuation routes, the potential for a "blue sky" evacuation order, the timeframes to implement evacuation and lane reversal plans, the economic impacts to the state and local jurisdictions from the loss of economic activity, and the inherent complacency of residents and visitors to heed evacuation warnings. Fortunately, a good deal of evacuation planning has been done for the Hampton Roads region of Virginia and specifically the lane reversal planning for the Interstate 64 corridor. VSP and other agencies have identified the resource requirements for this plan, have worked closely with local jurisdictions on fire and emergency medical service incident response during lane reversal and have coordinated on the use of the VDH's Health and Medical Emergency Response Teams to add emergency medical support along the evacuation corridor. Interagency meetings to finalize staffing, training, and exercises to execute the I-64 Lane Reversal Plan continue, with a command and communications exercise having recently been conducted on May 5<sup>th</sup> 2012.

Several evacuation planning-related topics were identified during this project:

I-64 Lane Reversal Planning. While the overall I-64 Lane Reversal Plan has been developed, it will continually need to be refined and strengthened so that gaps can be identified and addressed. There is discussion of conducting a full-scale lane reversal exercise on portions of the corridor to further validate and refine the plan. Further evacuation planning will be part of the next round of catastrophic planning, including a review of the two latest evacuation studies and the transportation research council study to determine overall evacuation capabilities.

Bower's Hill Lane Reversal Planning. Local jurisdictions have identified a need to further develop a lane reversal plan for Route 58/460 corridor from Bowers Hill west. Initiated in 2008 by VDOT, The Bower's Hill project would eliminate the Barco Diversion plan, and has the potential to reduce the Bower's Hill clearance time by 19 hours. Several significant concerns have been raised as to the feasibility of such a plan due to the highway being a non-limited access highway and the many personnel (law enforcement, VDOT, etc.) and resources that would be required to execute this plan concurrently with an I-64 lane reversal. More strategic and operational planning is required between State and local governments to move this project forward.

Local-level evacuation planning. Several participants noted the need for broader local level evacuation planning or strategies to be developed to integrate with the Commonwealth's evacuation plan – both with and without lane reversal. Lane reversal will allow for a greater number of cars moving westbound but requires integrated transportation planning between the locals and the Commonwealth to avoid confusion and gridlock of motorists on local roads trying to access the interstate. Local jurisdictions should make this a high-level planning priority and, where appropriate, the Commonwealth should contribute technical assistance.

Hurricane Evacuation Timeline. There continues to be considerable discussion and consternation between the Commonwealth representatives and some local jurisdiction emergency management representatives about the Hurricane Evacuation Timeline and the various time-critical decision points. The issue raises valid concerns – the Commonwealth needs a set amount of time to position personnel and assets to execute the I-64 Lane Reversal Plan and allow a minimum amount of time to cease operations prior to arrival of storm-force winds. Complicating this is the need to coordinate bridge openings to accommodate the potential evacuation of maritime vessels from the Port of Hampton Roads. Early evacuation decisions, however, can be met with resistance and lack of compliance by the local population when weather reports are not able to accurately forecast the arrival time and the strength of a storm with certainty. This causes additional challenges for local emergency managers.

Following Tropical Storm Irene in 2011, it was noted that several local jurisdictions in the Hampton Roads area questioned why the I-64 Lane Reversal plan, among others, wasn't activated. The Commonwealth's response was that the storm intensity didn't meet the plan's activation thresholds. One participant stressed that the I-64 Lane Reversal Plan is only "one tool in the toolbox" and that jurisdictions shouldn't assume that the plan will be automatically activated regardless of thresholds.

Meetings among all parties, possibly including agency/jurisdiction senior leadership, should be conducted to try to come to some sort of coordinated agreement on these issues to develop a decision planning matrix of their planning, training, and implementation schedule upon activation. This matrix would be a tool for the Commonwealth's decision makers to have a clear understanding of when decisions must be made and specifically what is occurring in the days and hours prior to an event. TIME is the enemy – time to implement the evacuation plans, time to further define the storm's track and intensity, and time before the Commonwealth's preparedness is truly tested.

## **Recommendations:**

1. Continue development and refinement of evacuation and traffic management plans, to include an annual exercise.
2. Continue implementation of planning based on completed study of Route 58/460 Lane Reversal feasibility study.
3. Conduct a senior management meeting to try to resolve the issues surrounding the Hurricane Evacuation Timeline's time-critical decision points. Engage State-level senior officials and local jurisdiction CAOs to assist with management level support. Discuss ways to reinforce State and local engagements as initiatives of collaboration and productivity. Integrate the lines of communication between State emergency management, local CAOs, and local emergency managers.
4. Evaluate the current staffing levels and job classifications for the state's local technical assistance planning team to better meet the level of need for planning assistance.
5. Add capacity to VDEM's regional footprint to effectively serve the demand for preparedness planning and technical support in Virginia's localities with emergency management programs.
6. Develop planning templates and furnish technical assistance to local jurisdictions to develop transportation plans that integrate with the Commonwealth's Evacuation and Lane Reversal Plans.
7. Conduct regional workshops to address and educate all Emergency Coordinators in evacuation roles, responsibilities and expectations.

## **CAPABILITY/TASK: COMMONWEALTH'S PREPAREDNESS CULTURE**

### **Reference(s):**

- Achieve a broad understanding of knowledge, attitudes, beliefs, behaviors, and perceptions from Commonwealth of Virginia agency and department stakeholders with roles and responsibilities under the COVEOP.
- Achieve a specific understanding of strengths, weaknesses, gaps, and areas for improvement from these stakeholders.

**Summary of the Issue:** Clarify the mission of emergency management at all state agencies.

**Analysis:** Mission and culture define emergency management organizations. During the project, the review team found that the terms "Emergency Management" and "Culture" were perceived differently depending on the audience. Some generally accepted definitions of key terms are offered by the project team to serve as a foundation for an analysis and discussion of Virginia's emergency management mission and culture.

Emergency Management - "The managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters."

Culture (n.) - The set of shared attitudes, values, goals, and practices that characterizes an institution or organization.

- *Merriam-Webster Dictionary*

The keys to successfully executing the emergency management mission are coordination, integration, and improving capabilities. Virginia's Governor has made emergency management a priority for his administration. While environmental factors such as the lack of economic growth and stability may have hindered the administration's financial ability to support and facilitate desired changes, State emergency management personnel at VDEM and other Commonwealth departments and agencies remain largely engaged and committed to their work. Generally speaking, State personnel take deep personal responsibility for their work and recognize their roles are vital to Virginia's emergency management system.

The project team also found State agencies to have widely varied and different understandings of the COVEOP and their emergency management mission roles and responsibilities. For example, several State departments and agencies shared their primary agency plans with the project team. Although some plans contained a significant level of detail and sophistication, others contained less.

Most State department and agency representatives were familiar with their own plans and procedures but had less understanding or knowledge of those of other departments or agencies. Other than copies on file at the VEOC, there is no centralized or designated repository for all State plans (VDEM does make many of its plans available on their website).

## **VIRGINIA'S EMERGENCY MANAGEMENT CULTURE**

The Commonwealth's emergency management culture is dynamic and multi-faceted, driven largely by a number of organizational and political factors. Several are discussed below.

Cultural Themes and Trends. To learn about their roles, responsibilities, knowledge, and beliefs, the project team asked key representatives from the State emergency management community to complete a confidential survey to gauge overall themes and trends and to identify State emergency management issues and challenges. Results showed that respondents generally felt well equipped and confident in their department or agency's ability to respond to disasters, but more than 70% said their agency depends on outside organizations for response resources. Over half of all departments and agencies said that they could staff 24-hour emergency response and recovery operations for more than a month, but more than 70% said that qualified responders were the most requested resource by their department or agency during a disaster.

At the State level, similar interviews revealed that emergency managers in many cases lacked the authority and empowerment to lead and make effective decisions at the working level within their areas of responsibility. The project team identified a need for senior emergency management leaders in the Commonwealth to develop a unified emergency management mission and delegate authority to mid-level managers and functional area leaders, thereby empowering them to "own" their functions and be more productive and successful in the day to day work. To increase effectiveness, mid-level managers should seek to learn "a little about a lot," particularly with regard to how their agency's specific areas of responsibility affect and are affected by other agencies and their areas of responsibility.

Executive Order 41. Executive Order (EO) 41, signed by the Governor on September 30, 2011, directed Virginia executive branch agencies to include emergency preparedness planning and training as a core competency of their mission. The order also reaffirmed the responsibility of each executive branch agency to appoint a primary and alternate Emergency Coordination Officer (ECO).

Although State participants think EO 41 has benefits for Commonwealth preparedness, many see it as a strategic policy that doesn't directly affect them.

State/Local Interface and Collaboration. Local participants said that the Hampton Roads region hosts and conducts more than 100 meetings a month on emergency management and preparedness planning, many focused on catastrophic planning. VDEM and other State agencies either host or participate in many of these meetings. The project team found that roles and expectations of local and State emergency management officials need additional clarification. Participants from local jurisdictions and State agencies solidly agree that their working relationships could be improved upon. Participants agreed that some type of senior executive level action was needed for both sides to fully engage in effective discussions. Moreover, there is agreement among all participants that each of the standing committees should be identified and reviewed for its role and effectiveness in accomplishing the Commonwealth's emergency management mission and that the roles and participation of meeting attendees should be defined and documented.

Local Emergency Management Directors and Coordinators. In some jurisdictions, the Chief Administrative Officers (CAOs) serves as the local emergency director. Some CAOs delegate their responsibilities to their fire chiefs, others to a dedicated local emergency management coordinator. In some cases, local emergency managers are two to three levels removed from their jurisdiction's CAO. In others, some CAOs serve as both CAO and emergency management director. In fact, 40% of CAOs in the Hampton Roads region wear both hats.

Lines of communication between State emergency management agencies, local CAOs, and local emergency managers were found in many cases to be fragmented and inconsistent. For example, during this project, VDEM sent a message to local CAOs introducing the project and requesting local plans and procedures for review. Many local emergency managers interviewed never got the message from their CAOs. Moreover, the project team learned that in several instances local emergency managers preferred autonomy in their positions rather than a close working relationship with senior leaders and local CAOs. The result is that the State's "customers" vary greatly in terms of their positions, skills, and approach to collaborative emergency management.

VDEM Outreach to Localities. The project revealed that VDEM's ability to regularly and effectively reach its customer base is severely constrained by its organization and resources. VDEM is externally organized into seven geographic regions. But there are only eight Regional Coordinators on staff to serve the needs of more than 130 local jurisdictions and more than 30 State departments and agencies with disaster mitigation, preparedness, and emergency response. Each regional coordinator averages almost 20 local jurisdictions that include major cities and metropolitan areas. While VDEM does have an additional five planners in Region 7, and 13 planners assigned to specific topical areas, that staff is stretched extremely thin. Moreover, State emergency managers don't generally see other State agencies or personnel as their customers but rather as peers. State emergency management would benefit from increasing the scope of its customer service focus and capabilities to include not only local emergency managers, but also its

State interagency partners. This could be accomplished through a shift in approach by the addition of appropriate staff resources at VDEM and state agencies to accomplish the mission.

**Recommendations:**

1. Develop clearer mission statements for the Virginia Emergency Response Team.
2. Ensure that primary and support agencies understand not only their roles and responsibilities but also how other ESFs support, integrate, and affect their operations.
3. Develop standard planning guidance and mechanisms for technical assistance for ESF support agencies to document their plans, processes, and procedures as part of the COVEOP.

**CAPABILITY/TASK: PLANNING**

**Reference:** Achieve a specific understanding of strengths, weaknesses, gaps, and areas for improvement from Commonwealth of Virginia agency and department stakeholders with regard to COVEOP planning.

**Summary of Issue:** Stakeholders across the board agree that while a tremendous amount of preparedness planning has occurred over the years at all levels of government, they also recognize gaps in supporting plans (SOPs) and functional areas. VDEM has a process in place to coordinate revisions to the COVEOP. However, there is no commonly accepted or standard process for State departments and agencies to develop or update their supporting plans.

**Analysis:** Participants identified multiple strengths in the area of planning. The I-64 Lane Reversal Plan is seen overall as strength. VDEM's Local Planning Assistance programs provide significant support to local jurisdictions, which is particularly helpful in rural jurisdictions without a full-time emergency planner. One of the benefits of regional planning and the Urban Area Security Initiative (UASI) grants has been the new regional Shelter Support Trailers and Pet Trailers as well as providing for the cost of the pre-wiring of designated shelter facilities for external generators.

In addition to the identified strengths, three items stood out as best practices throughout the Commonwealth. VDEM has developed "Tasking Cards" that correspond with more than 50 types of incidents, the Urban Search and Rescue program, and Hazardous Materials plans. EMAP assessors identified these cards as a best practice. Along the same lines, the Virginia Department of Health (VDH) has developed "playbooks" for all disaster types and all VDH functions and responsibilities. VSP has been a strong advocate over the past couple of years for Troopers and their families to establish "Go Kits" and Family Preparedness Plans in case of disasters. The Agency believes they are the most proactive agency in this area because Troopers are required to work during disasters, and to maintain productivity, a Trooper needs to feel confident that his/her family is safe and secure.

While considerable planning has recently been done, all participants could identify areas for improvement in current plans. Much of the discussion centered on sheltering and evacuation planning (both separate topics of discussion below), but a couple of strategic-level trends appeared during this process of technical plan review, surveys, and interviews, including the overall Planning Process including the 2007 COVEOP.



Planning Process. Many participants were not aware that there was a formal planning process in place to maintain the COVEOP and subordinate plans maintained by other agencies. Everyone agreed that the COVEOP is regularly updated and that all Virginia Emergency Response Team (VERT) agencies, and select private sector partners, and non-governmental organizations were tasked with reviewing the latest round of revisions as part of the comprehensive review and update. It was noted that some ESF lead agencies take a more proactive approach to managing and coordinating their COVEOP planning than others, creating challenges for support agencies trying to identify staffing and other resources to meet their roles and responsibilities. An improvement would be to put a process in place for VDEM, as the lead agency for the COVEOP, to review ESF and agency SOPs and documents to ensure that all roles and responsibilities are properly staffed, resourced, and coordinated with other COVEOP components. Integrated planning in the Commonwealth should foster collaboration among all State agencies, as well as solicit feedback from local jurisdictions (where applicable). Establishment of such a process would ensure that planning documents enable both horizontal and vertical coordination and a coordinated emergency response. The process should include the opportunity for support agency review, establishment of a detailed inventory of planning documents, greater program management involvement, and establishment of a plan review cycle, provision of detailed planning guidance, as well as strategic goals for improving planning document integration. Development of a process would enhance the abilities of the Commonwealth to respond to a major disaster through enhanced inter-agency coordination and a greater understanding of operational concepts. While these recommendations are ideal they also require significant personnel resources to achieve.

**Overall, participants identified the following planning gaps:**

Local Evacuation Plans. While a robust I-64 Lane Reversal Plan is in place, integrated broad local evacuation strategy with the State's evacuation plan (either with or without the implementation of the I-64 Lane Reversal Plan) is important to improving evacuation planning.

Re-Entry Planning. Re-entry is a significant issue, and individuals need clarification as to whether this is a local or a State responsibility. Local jurisdictions are concerned not only about the re-entry of citizens/residents but also of response/recovery personnel such as utility crews, insurance adjusters, and construction crews. With multiple access points across jurisdictions, managing the re-entry process will be intensive. Many residents will be required to cross multiple jurisdictions to return "home," therefore a well-coordinated regional plan is important.

Long-term Housing Solution. Long-term housing is a component of recovery, which the Commonwealth should increase attention to. Participants said that the issue of long-term housing is just now getting attention at the State, local, and regional level. The Hampton Roads Regional Catastrophic Planning Team (RCPT) intends to take up this issue in the next phase of its regional planning work.

**Recommendations:**

1. Conduct a COVEOP workshop to address and educate Cabinet Secretaries and state Agencies in roles, responsibilities, and expectations. Continue this practice annually.
2. Develop a policy or Executive Order requiring Commonwealth agencies to submit their plans and SOPs for executing their roles and responsibilities under the COVEOP to VDEM for review and coordination, and fund additional staff to perform this extra work.
3. Coordinate the development of a statewide re-entry strategy and support the development of local re-entry plans.

4. Coordinate the development of a long-term housing strategy and support the development of local long-term housing plans.
5. Coordinate the development of a statewide recovery strategy and support the development of local recovery plans.

## **CAPABILITY/TASK: TRAINING AND EXERCISES**

**Reference:** Achieve a specific understanding of strengths, weaknesses, gaps, and areas for improvement from Commonwealth of Virginia agency and department stakeholders with respect to training and exercises.

**Summary of Issue:** All participants agreed that the availability of training and exercises to support COVEOP execution is abundant across departments and agencies, but many say there's not enough time for all staff to complete the available training while maintaining their primary job duties; and further, that declining Federal grant funding for training and exercises could negatively impact these programs.

**Analysis:** From FEMA's online training curriculum to VDEM functional and specific training to department and agency developed training, all participants agreed that the opportunities for staff training and exercises are readily available. The biggest complaint was that it was hard for staff to find time to attend training and also do their regular jobs. The overwhelming majority of participants indicated that departments and agencies did a great job in making training available to other department and agency personnel. It was also noted by many departments and agencies that it was very common across the Commonwealth to allow for departments and agencies to piggy-back their internal exercises on other exercises being conducted as a way to both meet exercise requirements and reduce exercise development costs.

One concern identified by several participants is the continued elimination and/or reduction of Federal grant funds for Homeland Security programs such as the Urban Areas Security Initiative and the Homeland Security Grant Program. In these economic times and for the foreseeable future, Federal grant funding for these programs will likely be reduced, and with the Commonwealth heavily reliant on Federal grant funds to maintain these programs, alternative approaches to maintaining a robust training and exercise program should be developed. The Secure Commonwealth Panel has hosted several discussions on this issue. Continued education of State finance and budget decision makers is important on this matter.

### **Recommendations:**

1. Develop training and exercise strategy to mitigate the reduction in Federal grant funding to maintain a robust and productive training and exercise program across the Commonwealth.

## **CAPABILITY/TASK: SITUATIONAL AWARENESS**

**Reference:** Achieve a specific understanding of strengths, weaknesses, gaps, and areas for improvement from Commonwealth of Virginia agency and department stakeholders about situational awareness capabilities.

**Summary of Issue:** The proliferation of compartmentalized processes, technology, or methods to

maintain situational awareness of incidents within departments and agencies fosters confusion, stove-piping of information, and in some cases labor-intensive duplication. Standard capabilities shared by all would better serve the Commonwealth.

**Analysis:** Emergency response is about managing information and resources as close to real-time as possible. As part of managing information and resources, those in leadership roles need to manage the information flow, have accountability, maintain accountability, and use well established processes to support the function. The key components of situational awareness include the input providers, information collection process and technology, outputs, and users. As an example, how does the Commonwealth know all the gates are closed after a lane reversal? How is it recorded/reported? What is the process or technology used? Who are the people that need to know? During the interview process, when the questions about situational awareness were asked, responses centered on “feeding” the process for the 12-hour Situation Report. There was little discussion about the processes in place for real-time situational awareness. Situational Awareness is much more involved than producing a Spot Report or Situation Report. Virginia has several real time situation capabilities that could be improved on and better socialized with potential users.

There was little consensus among participants on the value or robustness of the current processes and technology to maintain situational awareness during incident management. One agency sees WebEOC as a considerable strength for managing incidents and has implemented it across the Commonwealth in their regional offices, while another agency uses WebEOC only to report up to the VEOC, but has had to implement a different process and technology to adequately address their specific needs because WebEOC doesn’t meet their requirements. It was noted that any technology supporting situational awareness helps, given limited staffing during these economic times. It was also noted that there are three “versions” of WebEOC being used throughout the Commonwealth – State, Region, and Local versions – with a need for integration between them to roll-up information to the State without someone physically re-entering data into each WebEOC version. Several recommendations arose about situational awareness and its value to stakeholders to include: adjusting the timing of operational reporting periods to VEOC depending on the type of incident, managing incident updates and reports so they are not eclipsed by a late-breaking incidents, evaluating what reports are really needed/beneficial, and scaling their electronic size so as not to interfere with users’ email account functionality and changing the format of conference calls to focus more on operations than on updating the weather. The project team recognizes that each department and agency has unique situational awareness criteria to manage their own roles and responsibilities and that no one technology will be the “be all, end all” for the whole emergency management community. But like many functions within emergency management, situational awareness crosses multiple technologies and input sources. The key is to develop a process for collecting and managing information for the multiple sources to allow for proactive responses to the incident.

#### **Recommendations:**

1. Evaluate the current processes and technologies used for situational awareness across all departments, agencies, and levels of government to create a methodology for maintaining near real-time situational awareness of events occurring throughout the Commonwealth.

## **CONCLUSION**

It was recognized that there are scores of professionals across the Commonwealth and local jurisdictions working hard to increase preparedness and operational capabilities to support emergency management. It is also clear there will always be existing challenges and room to improve. There is a need for additional resources to create the policy, strategy, plans, procedures, and capabilities required across the emergency management spectrum to enhance existing, and develop new capabilities to optimum levels. With the interdependencies between functional areas, both horizontally and vertically, being such a critical factor in emergency management, strong oversight and processes need to be in place to ensure plans, policies, processes, and procedures are integrated throughout the Commonwealth.

## **APPENDIX A. ACRONYMS**

AAR	After Action Report
CAO	Chief Administrative Officer
CAP	Corrective Action Plan
CERT	Citizen Emergency Response Team
COOP	Continuity of Operations
COVEOP	Commonwealth of Virginia Emergency Operations Plans
CPG	Comprehensive Preparedness Guide
ECO	Emergency Coordination Officer
EM	Emergency Management
EMAP	Emergency Management Accreditation Program
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESF	Emergency Support Function
FAC	Family Assistance Center
FEMA	Federal Emergency Management Agency
HRPDC	Hampton Roads Planning District Commission
HSEEP	Homeland Security Exercise and Evaluation Program
IP	Improvement Plan
IPEC	Integrated Planning Executive Committee
MA	Mission Assignment
MOU	Memorandum of Understanding
NASA	National Aeronautics and Space Administration
NIMS	National Incident Management System
OVAHS	Office of Veterans Affairs and Homeland Security
PA	Public Assistance
RCPT	Regional Catastrophic Planning Team
RFA	Request for Assistance
ROLR	Refuge of Last Resort
RRPDC	Richmond Regional Planning District Commission
SITREPS	Situational Awareness Reports
SMS	State Managed Shelter

SOP	Standard Operating Procedure
SWAN	(Virginia) StateWide Alert Network
TCL	Target Capabilities List
UASI	Urban Area Security Initiative
VCIN	Virginia Criminal Information Network
VDEM	Virginia Department of Emergency Management
VDH	Virginia Department of Health
VDOT	Virginia Department of Transportation
VDSS	Virginia Department of Social Services
VEOC	Virginia Emergency Operations Center
VERT	Virginia Emergency Response Team
VERTEX	Virginia Emergency Response Team Exercise
VITA	Virginia Information Technologies Agency
VSP	Virginia State Police